## J.4 CONTRACTOR GUIDELINES FOR A SOFTWARE DEVELOPMENT PLAN (SDP)

## CONTENT OF THE SDP

The Contractor's SDP should be tailored to reflect the constraints and responsibilities of the overall IRS project described by the IRS SOW, such as the chosen software development methodology. The level of detail provided by the plan should be consistent with the level of effort expended on the project.

The following paragraphs describe a generic outline of information that the IRS requires in a Contractor's SDP, as necessary for SEI SW-CMM® or CMMI<sup>SM</sup> Level 2. This outline describes the basic types of information that should be represented in an SDP and should be tailored to fit the chosen software development methodology. **The italicized words below represent elements of the SDP that are expected to be present, regardless of the Contractor's choice of SDP format.**

Note: The discussion below refers to software development practices that would be performed by the Contractor as specified in the SOW and should not be confused with software development activities performed by internal IRS software development organizations.

### *INTRODUCTION*

- *Background - Describe the IRS project and the role of the software to be developed according to this SDP.*

- *Scope -Present the scope of the SDP as it relates to the associated Statement of Work (SOW.)*

This information is usually stated in the SOW. It is requested here to confirm that the Contractor has a clear understanding of the effort.

### *Project Management*

- *Software Development Organization - Provide a description of the Contractor's organization that will accomplish this task. Describe internal interfaces and levels of authority, including subcontractors if applicable, especially interfaces among development, test, and QA, as well as points of contact with the IRS.*

- *Subcontracting Plan - Provide a description of how the Contractor will use this SDP to manage subcontractors, where applicable.*

- *Metrics - Explain the techniques that the Contractor will apply to determine the effort, resources, time, and cost required for various elements of the task. Explain the use of metrics in managing the task.*

- *Reporting - Explain how and at what intervals the Contractor will measure and report progress to the IRS.*

**Software Requirements**

- *Purpose and Description - Provide a top-level narrative description of the software and its primary functions.*

- *Allocated Requirements - List the system requirements to be satisfied by the software as presented in the SOW or accompanying design documents. This section may reference other documents.*

**Technical Approach**

- *Methodology/Design - Explain how the Contractor plans to accomplish the development effort. Include specific development techniques, required software and hardware tools, and the use of non-development software.*

- *Procedures and Standards - Explain how the Contractor will address the following, particularly in accordance with the IRS standards cited in the SOW:*

  - *Software Life-Cycle*
  - *Quality Assurance*
  - *Configuration Management*
  - *Risk Management, including identified risks and their management*
  - *Testing and Acceptance Criteria*
  - *Security and Privacy Assurance Planning*

**SCHEDULE**

- *Work Breakdown Structure - Provide a Work Breakdown Structure (WBS) as a framework for staffing and managing the software development effort.*
- *Schedule*
  - *Provide a detailed graphical schedule(s) that includes, at a minimum:*
    - *task deliverables and other work products*
    - *interim milestones for tracking deliverables on a monthly basis*
    - *start and stop dates for all activities at the lowest level of the Work Breakdown Structure (WBS) described in the proposal*

- *all milestones identified in the software life-cycle and QA Plan*
- *all project reviews, including monthly status reviews*

### *RESOURCES*

- *Staffing - List the number and types of personnel required during each phase of the development.*

- *Equipment - List all equipment required to support the development of Project software, including requirements for equipment to support a Software Support Environment (SSE) that includes CASE tools.*

- *Materials and Facilities - List and describe all materials, facilities, and other resources, including the software portions of the SSE, required to support the development of the Project software.*

- *Non-development Software - Identify the COTS, GFI and GFE software that the Contractor will use on this task and explain the specific benefits and risks that will arise.*

- *Other - Describe any resource requirements not listed above.*